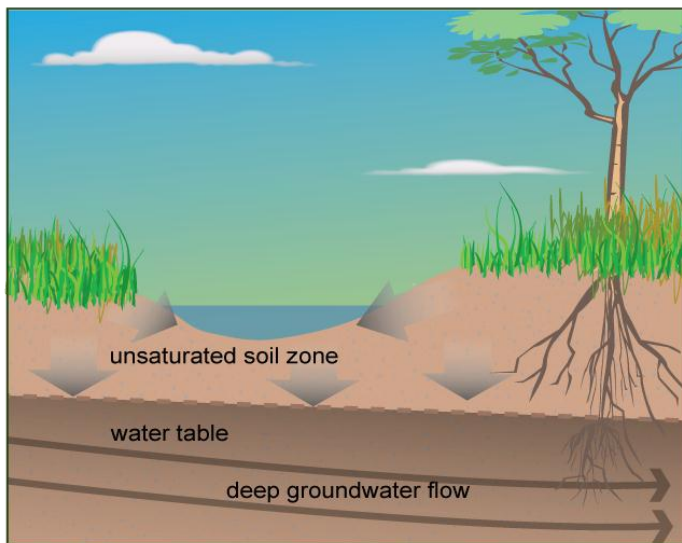


VEGETATION



These activities will give you and your group some valuable information which might help you when solving the crime.

What do trees do in the environment?



Brainstorm the benefits of having trees. Use the diagram to help you think of ideas.

1. What does the tree help to do?
2. What might happen if the tree was removed?

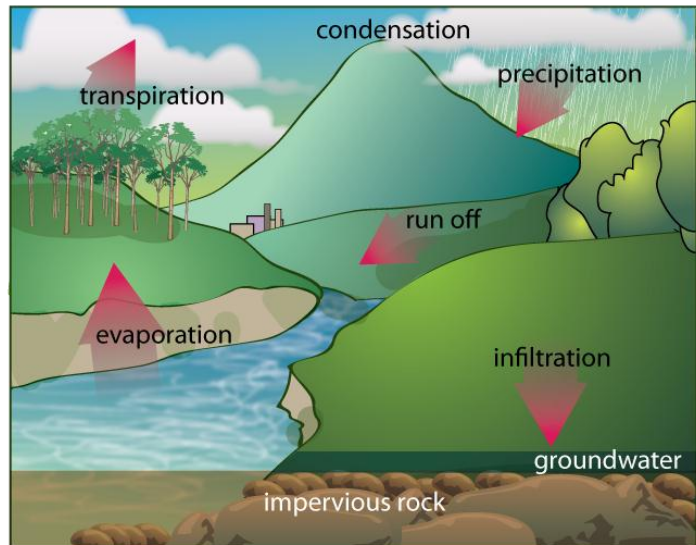


The water cycle



What do these terms mean? You can use the internet and the diagram to help.

- evaporation
- transpiration
- condensation
- precipitation
- runoff
- infiltration
- groundwater
- impervious rock



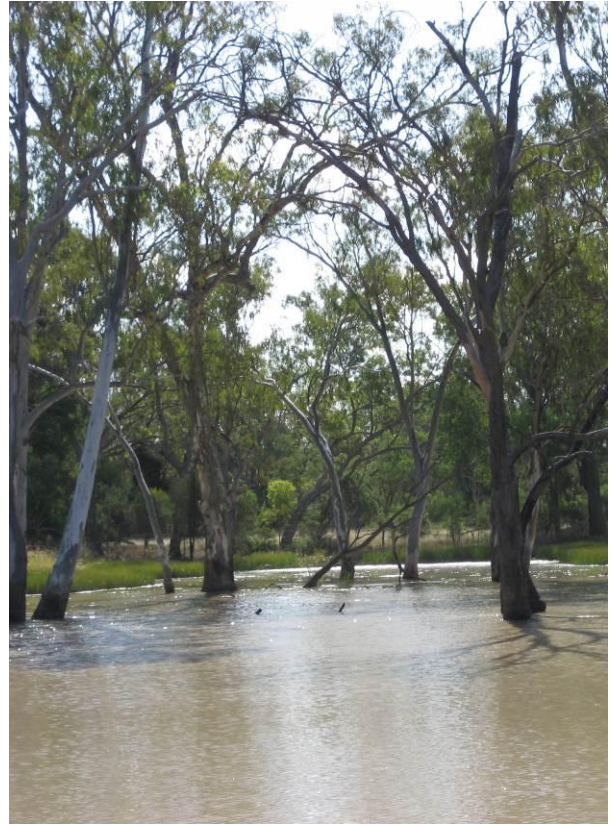
Write your own definition of transpiration.

Why are plants along a river so important?

Why are plants along a river so important?



- Why are wetland plants special?
- Find out the names of at least three common species of wetland plant.
- What makes these plants able to survive in the marshy ground of a wetland?
- What might happen if these plants were removed?



Activity



Be prepared! You will need to set up this experiment and leave it for about three days. (Note: the number of days could vary, depending on the weather.)

1. Take a stick of celery and place it in a container of brightly coloured liquid (water coloured with ink or food dye). Check after a day or two. What happens?
2. Tie a plastic bag over a few leaves of a plant growing outside. Check after a day or two. What happens?
3. Record your findings.

Water is carried up the stem of a plant in tissue called the xylem. In trees this tissue is what we know as wood. Together with phloem, xylem is one of the two transport tissues of plants. Xylem sap always moves from the roots to the leaves like water in a series of pipes. The most important cause of xylem sap flow is transpirational pull, caused by the transpiration of water from leaves.)

Try this activity as a follow-up to your experiment: (look at the first experiment, Thirsty seedlings) http://www.derm.qld.gov.au/education/teachers/catchment/resources/catchment_resource_sheet_05.pdf

Sharing information

What have you found out that might help you understand the crime? Share this information with the other groups.

Find out a way to explain the role of vegetation in the waterways. You could use labelled diagrams to help you. Use the results of your experiments.

Prepare a presentation to get your message across to the rest of your team.

Useful links

<http://www.nrw.qld.gov.au/factsheets/pdf/river/r30.pdf>

<http://www.derm.qld.gov.au/education/teachers/water/activities/activity07.html>

http://www.ipswich.qld.gov.au/documents/environment/activity_sheet_6_weeds.pdf http://www.ipswich.qld.gov.au/documents/environment/activity_sheet_3_vegetation_and_habitat_health.pdf